(10)

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

BYATARAYANAPURA DIVISION

KODIGEHALLI SUB DIVISOIN

Name of the Work : **Drilling of borewell Providing pipe line in Ward No. 08 Kodigehalli**

Estimated Cost : **10.00 Lakhs**

Job Code : **008-18-000085**

BRUHATH BANGALORE MAHANAGARA PALIKE

Name of the work:- **Drilling of borewell Providing pipe line in Ward no. 08 Kodigehalli.**

							Est. Cost Rs.		1000000.00
Sl. N	Description	Unit	Dimensions				Qty.	Rate	Amount
			No	L.	B.	D			
1	Carrying out geophysical survey Geophysical investigation of site for sinking borewell for supplying drinking water to the habitation either through the hand pump, MWS or P.W.S.S. by vertical electrical sounding by adopting gvenner or schiberger's method, including reconnaissance survey of geological formation, geophysical investigation of existing ground water in the vicinity, its quality and acceptability of the users indicating the licating the location of site, recommended depth of 1.0 mtrs in consolidated formation for proper seating of casting pipe, depth of drilling required to cover full depth of acquifer proposed to be tapped, probate yield and other information required including transportation and accessories to work site, engaging technical personal and labour required etc.,(Page.no.47, item no.9.4) PRED SR 2012-13.								
		No	1				1.00	1938.46	1938.46
2	Sinking borewell of 165mm dia clear using super fast Hydrolic rig of capacity 250 PSIG na above 900 CFM and abaove in all strats including over burden upto 20M. fixing of casing pipes collars and cap with necessary, cutting and threading including transportation of rig and supporting vehicles, crew charges and cost of consumbables etclm complete including yield testing at the final depth with a minimum work in on compression for an hour (excluding cost of casing pipes collars cap etc.,)(P-46,I.NO.9.1 TO 9.1.6)PRED SR 2012-13								
a	Upto 50.00m depth	Rm tr	1	50			50.00	315.18	15759.00
b	Above 50.00 to 100.00m depth	Rm tr	1	50			50.00	412.00	20600.00
c	Above 100.00 to 150.00m depth	Rm tr	1	50			50.00	458.35	22917.50
d	Above 150m to 200m depth	Rm tr	1	50			50.00	484.10	24205.00
e	Above 200m to 250 m depth	Rm tr	1	50			50.00	560.32	28016.00
f	Above 250m to 300 m depth	Rm tr	1	50			50.00	600.49	30024.50

3	Supplying of ISI Mark 175 mm nominal bore, Plain end steel casing pipe - grade of steel Fee 410 of wall thickness 5.4mm thick confirming to IS 4270:2001 medium black ERW casing pipe of 5mm thick black electic resistance continuous welded midle steel tube material confirming to IS 1387 / 1993 and manufactured from hot rolled steel skelp / stripes in random length of 4 to 7 mtr both ends threaded confirming to IS 554/1985 one end fixed with a socket and the other and with a plastic protection end (including of all taxes) (Page no.III, Item No.84)PRED SR 2012-13								
	Casing pipe	Rm tr	1	40			**40.00**	**1325.00**	**53000.00**
4	Providing 175mm dia MS Collar (Page no.III, Item no.86) PRED SR 2012-13								
		Nos	1	10			**10.00**	**150.00**	**1500.00**
5	Providing 175mm dia Bore Cap CE (M) (Page no.III, Item no.85) PRED SR 2012-13								
		Nos	1				**1.00**	**100.00**	**100.00**
6	Providing and fixing 250mm dia PVC (casing pipe) (Page no.XXXI,Sl. no.909) KPWD SR 2015-16								
		Nos	1	10			**10.00**	**2600.00**	**26000.00**
7	KSRB 13.3.6 : Providing and fixing in trenches galvanised / mild steel tubes (medium grade) 50mm dia nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM of equipments and testing complete as per specificatiions. Specification No.KBS 13.2.14 / 13.6 (Page No.90, Item No. 13.15) KPWD SR-2015-16								
		Mtrs	1	250			**250.00**	**456.86**	**114215.00**
8	Atalanta, Suguna, CRI .KIRLOSKAR and other equipments pumps 10.00 HP/7.5KV(20 stage) (Page No.XXXX, Sl.No.21) KPWD SR-2015-16								
		Nos	1				**1.00**	**50100.00**	**50100.00**
9	Supply and drawing 3 core flat sheathed submersible pump cable manufactured with celectrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS 8130-1984 and virgin grade PVC insulation and sheathed suitable for working voltage upto 1100 Volts as per 1x3x4 sqmm of 56 strands 0.3mm dia Group A (Page no.12, item no.2.10.3) PWD Elctricla SR 2014-15 3Cx4.0Sqmm.								
		Mtr	2	280			**560.00**	**126.70**	**70952.00**

10	Providing and fixing in position 50mm nominal bore non-return valve vertical type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications.(Page no.93, Item no.13.62) KPWD SR 2015-16								
		Nos	1				1.00	1515.80	1515.80
11	Supplying and fixing 50mm GI Union (Page no.XXXVII) KPWD SR-2015-16								
		Nos	1				1.00	223.70	223.70
12	Supplying and fixing 50mm GI Elbow (Page no.XXXVII) KPWD SR-2015-16								
		Nos	2				2.00	111.80	223.60
13	Supplying and fixing 50mm GI Nipple (Page no.XXXVII) KPWD SR-2015-16								
		Nos	2				2.00	104.30	208.60
14	Supplying and fixing 50mm GI Collar (Page no.XXXVII) KPWD SR-2015-16								
		Nos	2				2.00	109.00	218.00
15	Fabricating supplying and mounting MS box made out 14SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrengements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete.(Page no.49, Item no.6.40.1) PWD Electrical SR 2014-15 .								
		Sq cms	1	2	100	100	20000.00	0.37	7400.00
16	Supplying and fixing angle iron frame work fabricated out of M.S angle iron.. And M.S flat .. With bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint.(Page no.49, Sl.No.6.39.2)50x50x6mm Electrical SR.2014-15								
		Mtr	1				1.00	338.00	338.00
17	Supplying of TPST with rewireable porcelain Channels in SM encloser. Made out of 14 SWG powder coated paint of approved colour. 32 Amps (Page no.44, Sl.No.6.5.1) Electrical SR 2014-15 32 amps P.30 It No.1 (b)								

		Nos	1				1.00	1868.00	1868.00
18	Supplying and fixing 20"x20"x2.5" polished wood board made up not less than 15mm thick plank with front plank one end provided for olding at other end fixing the same of the valve using through bolts and nuts (P.No.44 SL.No.6.6.6) Electrical SR 2014-15								
		Nos	1				1.00	302.00	302.00
19	Supplying and fixing LED Type panel board indicating lamp with required colour suitable for 220V AC 50 Hz 12/24 DC (P.No.48, Sl.No.6.36)(Electrical SR2014-15)								
		Nos	1				1.00	442.00	442.00
20	Supplying fully automatic star-Delta starter unit push button type with suitable wires, 2 contactores, one adjustable thermal timer mounted on a common base palte held in steel encloser for use on 400/440 volts 3 phase and wired after fixing to the wooden board for motor. Upto 12.5HP (page no.44, SL.No.6.2.1) (Electrical SR2014-15)								
		Nos	1				1.00	6583.00	6583.00
21	Suppling and fixing single phase preventor using necessary wires over an existing panel board suitable for motor up to 20HP capacities.(Page no.44, SL.No.6.3) (Electrical SR2014-15)								
		Nos	1				1.00	768.00	768.00
22	Wiring for lighting /power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP-A.4 sqmm (Page no.6, Sl.no.2.5.4) (Electrical SR2014-15)								
		Mtrs	1	20.00			20.00	42.10	842.00
23	Supplying, fixing and wiring heavy duty low voltage capacitors confirming to IS 2834 Phase, 400/440 volts grade, for power factor improvement of rotating machinery. (Page no.48, Sl.no.6.35) Electrical SR2014-15								
		Nos	1	4.00			4.00	414.00	1656.00

24	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 40-63Amps TPN (Page no.47 Sl.No.6.16.6) Electrical SR2014-15							
		Nos	1				**1.00**	**1936.00**	**1936.00**
25	Supplying and fixing wiring earth electrode for grounding conduits, I.C cutouts and other equipments on the meter board using 40mm dia 2.90mm thick GI pipe 2.5mtr long buried in a pit .. The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia (page no.55, Sl.no.7.1) Electrical SR2014-15							
		Nos	1				**1.00**	**2727.00**	**2727.00**
26	Supplying and fixing class A (medium duty)-GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 K.V. class 40mm (P.No.62, Sl.No.7.12.1) Electrical SR2014-15							
		Mtr	1	5			**5.00**	**345.00**	**1725.00**
27	Supplying of 1.1 KV LTUG Cable having alluminium conductor PVC insulated extruded inner sheathed , galvanized, steel strip (except 2C X 10sq.mm wire armoured) confirming to IS-3975:1990(No.of Strip indicated in GTP) & extruded PVC outer sheathed armored cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A.4 core 16 sqmm (Page no.55, Sl.no.7.4.4) Electrical SR2014-15							
		Mtrs	1	25			**25.00**	**140.40**	**3510.00**
28	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe/on wall/on poles as required. In existing trench/duct. 6 sqmm to 16sqmm (Page no.61, Sl.no.7.8.1) Electrical SR2014-15							
		Nos	1	25			**25.00**	**10.80**	**270.00**
29	Digging of trenches of 0.6 x 0.50m wide refilling the trench to the required ground level and consolidating etc., compelte (Page no.61, Sl.no.7.9.2) Hard soil Electrical SR 2014-15							
		Mtr	1	30			**30.00**	**106.00**	**3180.00**

30	Supplying and fixing LT cast iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumin insulating compound compelte with terminals, clamps, bolts nuts and washers etc., for 16 sqmm (Page no.62, Sl.No.7.13.2) Electrical SR 2014-15								
		Nos	1				**1.00**	**280.00**	**280.00**
31	Supplying and fixing of procelin fuse channel with cutouts on existing wooden/panel using necessary nuts, bolts and washers. 63Amps (Page no.44,Slno.6.7.3) Electrical SR 2014-15								
		Nos	1	6.00			**6.00**	**234.00**	**1404.00**
32	BESCOM Deposit charges and miscellanesous								**15000.00**
33	KSRB : Earth work excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m. after breaking of clods complete as per specifications.(Page No.5, Item No. 2.4) KPWD SR 2015-16								
	pipe line	Cu m	1	1550.00	0.45	0.60	418.50		
	for taps		75	5.00	0.45	0.60	101.25		
							519.75	**299.98**	**155914.61**
34	Supplying PVC ring tight pipes conforming to IS 4985:2000 with latest amendments and conveying to worksite rolling and lowering into trenches laying true line and level and perfect linking at joints testing and commissioning including loading and unloading at both destination and cuts of pipes wherever necessary including jointing of PVC pipes and specials (excluding cost of specials) with jointing of approval type with all labour with all lead and lift including encasing the pipe alround to a depth of not less than 15 cms with soft gravel or selected earth available from the excavation etc., compelte and giving necessary hydraluic test to the required pressure as per IS (Contractor will make his own arrangement for procuring water for testing) (Page no.53, Item no.1(3) BWSSB SR-2014-15)								
		Rm tr	1	1550.00			**1550.00**		
							1550.00	**77.38**	**119939.00**

35	KSRB : Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m and lift upto 1.5m including cost of all labour complete as per specifications allow 60% of rate considered under item.(Page No.6,Item No. 2.11) KPWD SR-2015-16								
		Cu m	1	1550.00	0.45	0.6	418.50		
							418.50	**80.56**	**33714.36**
36	Providing and fixing 65mm dia Gun metal Wheel valve conforming to IS specification of approved make as per directions including all lead and lift etc., compelte 50mm (PWD SR 2015-16,Page no. XXIII,Sl.no.661,code no.0128)								
		Nos	1				**1.00**	**1431.00**	**1431.00**
37	KSRB 4 - 1.5 : Providing and laying in position plain cement concrete of mix M 20 with OPC cement @300 kgs, with 20 mm and down size graded granite metal coarse aggregates @ 0.64 cum and fine aggregates @ 0.43 cum with superplastisiser @ 3 lts confirming to IS 9103 - 1999 Reaffirmed - 2008, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation plinth and cills, including cost of all materials, labour HOM of machinery curing complete as per specifications. Specification No.KBS 4.1, 4.2 (Page No.12, Item No. 4.5)								
	For Individual connection		75	5.00	0.45	0.10	16.88		
							16.88	**5874.52**	**99132.53**
38	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778 having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete (internal work exposed on wall) 20mm nominal OD pipes (Page No.96, Item No. 13.85.2) KPWD SR 2015-16								
	For Taps	Rm t	75	5.00			375.00		
							375.00	**143.10**	**53662.50**
39	KSRB 13.6.1-1 : Providing and fixing in position brass bib cock of approved quality 15mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No.KBS 13.2.19 / 13.16 (Page No.91, Item No. 13.23) KPWD SR 2015-16								
	For Taps	Eac h	75				75.00		
							75.00	**244.86**	**18364.50**

	Lead for disposal of debries shall be payable at carriage rates by mechanical means including loading and unloading as per 13.30 kms			
	Debries clearance Near Borewell Spot	38.00		
		38.00	**112.44**	**4272.72**
			cum	
42	Miscellaneous and unforseen cahrges			**1620.63**
			TOTAL	**1000000.00**

(RupeesTen lakhs only)

CERTIFICATE

1. The above Estimate has been prepared as per PWD Bangalore Circle Schedule of Rates 2016-17 Electrical SR 2014-15 and BWSSB SR 2014-15
2. Certify that the work spot has been inspected by his & prepared the estimate in most economical way of executing the work.
3. The Work Spot comes under BBMP Limits
4. This Estimate is prepared with Essential Provisions

Asst. Engineer
Ward No.8

Asst. Executive Engineer
Kodigehalli Sub Division
BBMP

01/06
Executive Engineer
Byatarayanapura Division
Bruhath Bangalore Mahanagara Palike

ADMINISTRATIVE APPROVAL
01/06
Accorded For Rs. Ten lakhs only
Head of A/c. P-1771
Div. Ref. No. 06 Date 01/06
01/06 AE
01/06 EE(BTP)

TECHNICAL SANCTION
Accorded For Rs. Ten lakhs only
Head of A/c. P-1771
Div. Ref. No. 06 Date 01/06
01/06 AE
01/06 EE(BTP)